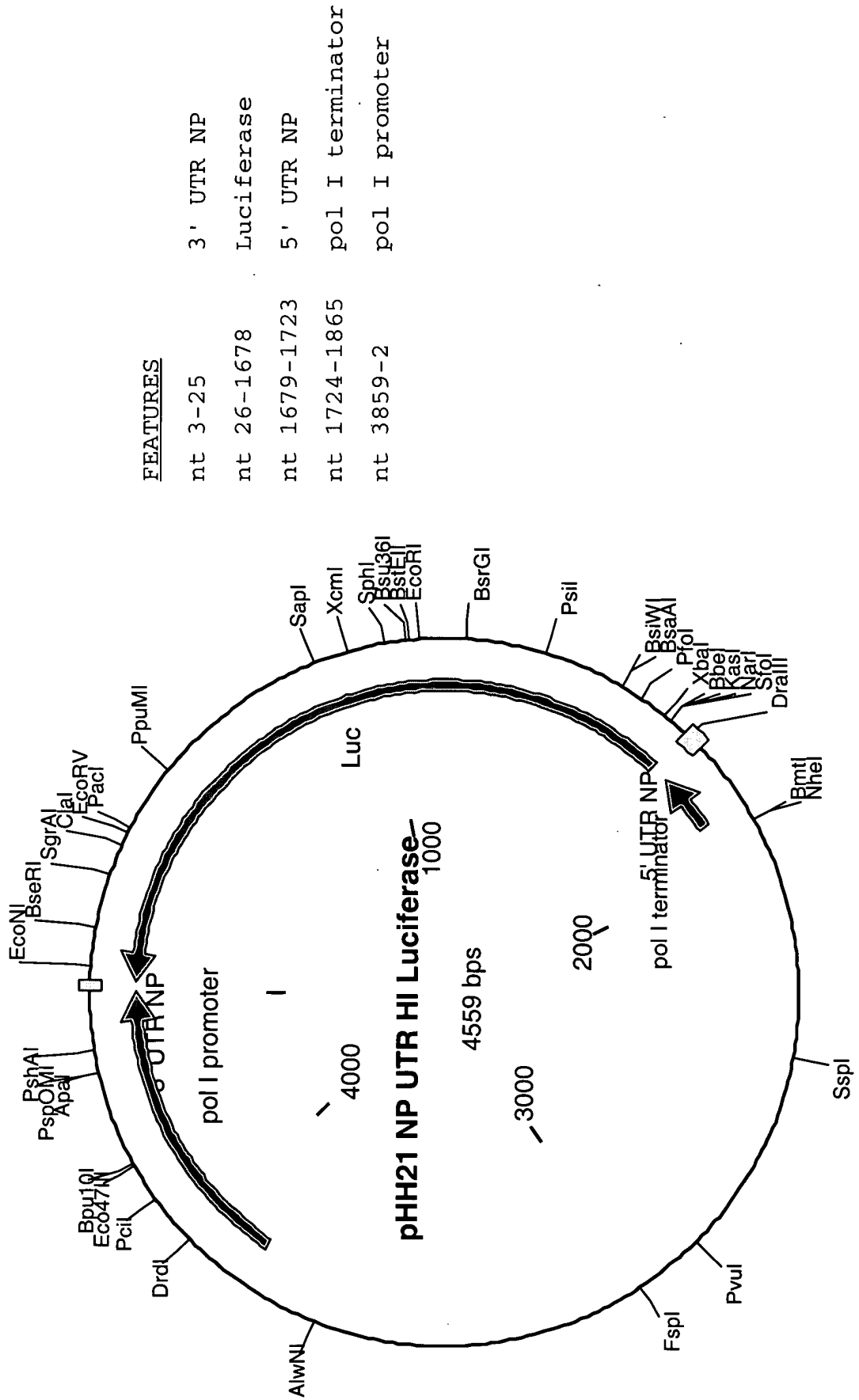




# MAP OF PLASMID pHH21 NP UTR luciferase



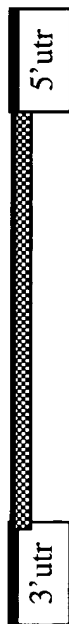
# TRANSCRIPTION, REPLICATION AND TRANSLATION OF A SEGMENTED NEGATIVE STRAND VIRUS ARTIFICIAL SEGMENT



pHH21 NP UTR HI Luciferase

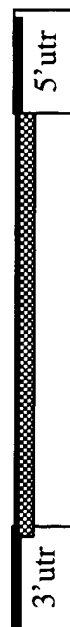


Transfect cells  
with plasmid



Host cell RNA polymerase I enzyme transcribes a  
negative polarity RNA molecule

Infect with virus-  
containing sample or  
introduce viral  
polymerase components

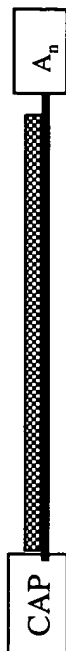


Viral polymerase replicates the +  
polarity RNA into - polarity RNA

replication

**Reporter protein**

OR

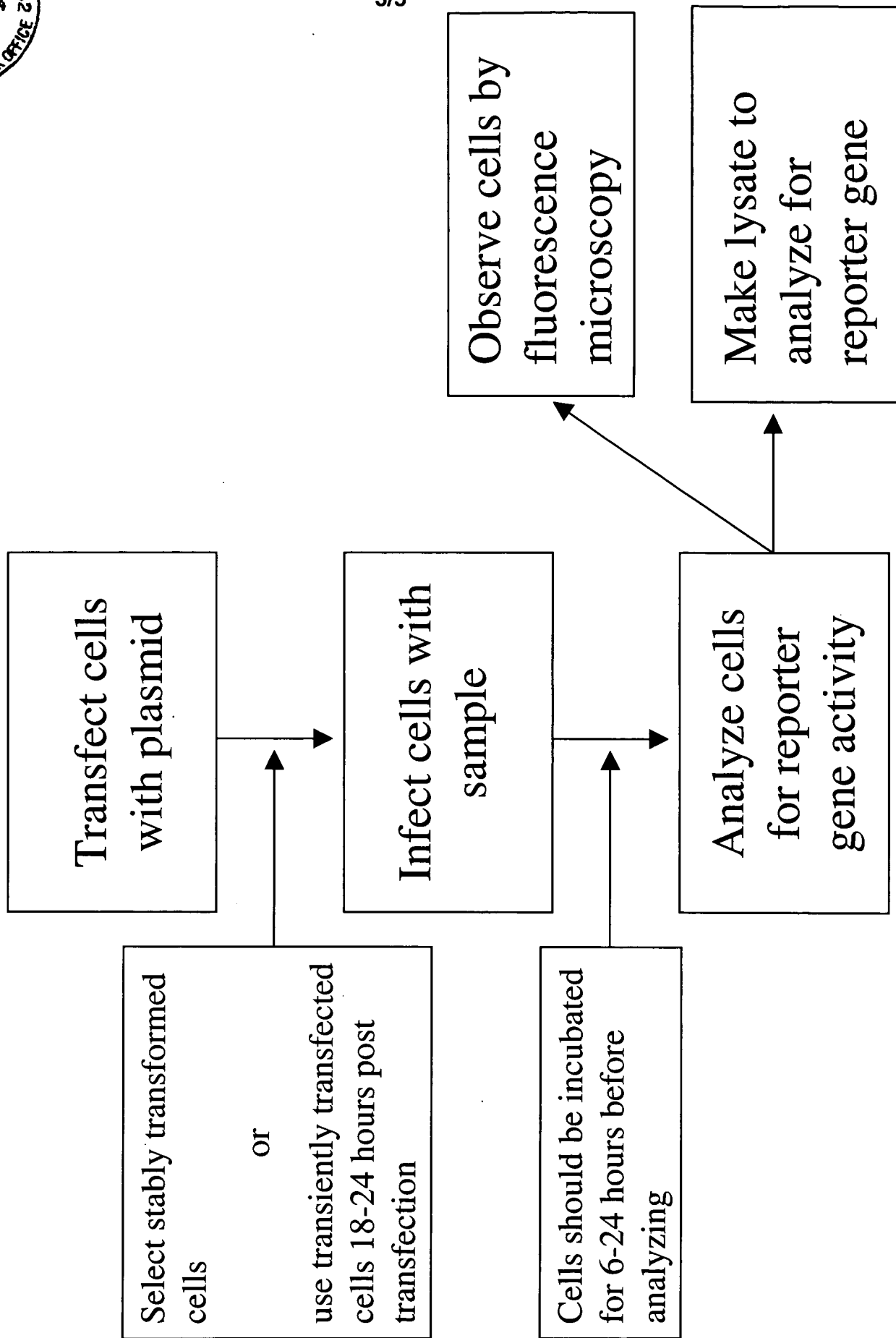


Viral polymerase recognizes the  
reporter gene containing RNA,  
replicates it into a positive polarity  
RNA molecule and transcribes it into  
an mRNA

translation

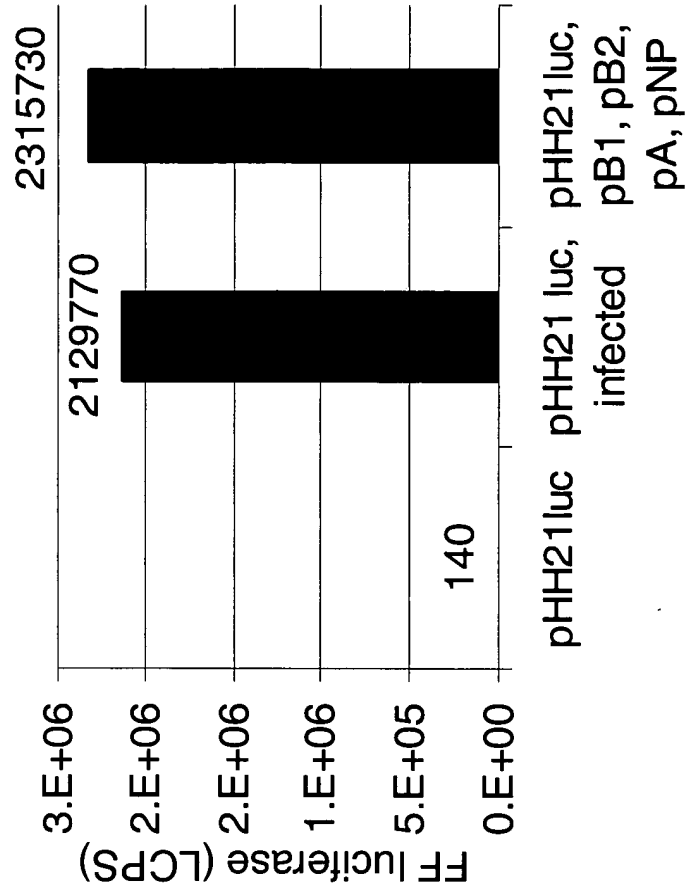


# METHOD FOR DETECTING VIRUSES USING VIRAL POLYMERASE RESPONSIVE REPORTER GENES





# Luciferase reporter gene assay





# GFP reporter gene assay

